



Get the Switch Out!

Virginia's Pilot Project to Remove Mercury Switches from "End-Of-Life" Vehicles



The Virginia Automotive
Recycling Association

What? Removal of mercury switches from convenience lighting in the trunk and hood of "end-of-life" vehicles.

The Virginia Department of Environmental Quality has partnered with the Virginia Automotive Recyclers Association (VARA) to sponsor a pilot project to **remove mercury tilt-switches in automobiles**. Salvage operations that volunteer to remove the switches will receive a **Mercury Switch Collection Kit** from the Virginia DEQ. The kit includes a collection bin that can hold up to 450 switches, and a prepaid shipping box. Once full, the box can be shipped to AERC Recycling for free processing of the mercury switches.



Why? Mercury is a Neurotoxin

Mercury is at the top of the US EPA's list of Priority Chemicals. Once emitted into the environment, mercury reacts to form **Methylmercury**, which then accumulates within the foodchain and disrupts normal reproduction and neurological development. For this reason, pregnant women and small children are generally advised against eating fish. One gram of mercury (the amount contained in a mercury switch) can contaminate a large waterbody.



Anyone out there like to FISH?

Or to eat fish? Virginia now has *Fish Consumption Advisories* for 9 water bodies covering 333 river miles due to mercury contamination.

Mercury Switch Collection Kit



AERC Recycling
Solutions

Why Salvage Operations?

Mercury tilt-switches are used in the lighting assembly for hoods and trunks and in ABS brake systems. If not removed, the mercury in the switches is vaporized and emitted into the air when the scrap is processed into steel.

How Do We Sign Up?

Contact the VARA at 804-643-4433.

Questions? Call the VARA or the Virginia DEQ's Tom Griffin at 804-698-4545 or check out the DEQ website at

www.deq.virginia.gov/p2/mercury



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How to Remove Switches?

The auto manufacturing industry has used mercury switches for a variety of functions: lighting, ABS brake systems, batteries, rear defrosters, air bag sensors, keyless entry systems, etc.. The Virginia Switch Out focuses on the mercury switches in the convenience lighting in hoods and trunks. **Why?** Because they represent the bulk of mercury switches used consistently in vehicles produced over the past 3 decades...and they are the easiest to remove!

Switch Removal Guides. There are various lists and sources of information available concerning the makes and models that have used mercury switches for what function. If interested, some of the better sources are listed on the [US EPA's Auto Mercury Switch Removal webpage](http://www.epa.gov/epaoswer/hazwaste/mercury/carswich.htm): <http://www.epa.gov/epaoswer/hazwaste/mercury/carswich.htm>

Keep It Simple!



The Institute of Scrap Recycling Industries, Inc., the trade association of the scrap industry, recommends a less complicated approach. Don't worry too much about having your dismantlers look up the make and model for each car to check and see if it has mercury switches -- just make it your normal practice to remove all hood and trunk lighting assemblies from all American-made cars! Pry open the assembly to reveal the switch. Shake the switch - if it rattles, the switch contains a ballbearing, and isn't a mercury switch. If it doesn't rattle, it's a mercury switch. Put the switch in the collection bin. Your dismantlers will quickly pick up on the general makes and models that they can avoid.

It's Easy!

- 1-Remove Lighting Assemblage
- 2-Pry Open & Pull Out the Switch
- 3-Shake the Switch



If it does NOT rattle, it IS a mercury switch -- Put it in the Collection Kit!!

If it DOES rattle, it is a ball-bearing switch; and it does NOT contain mercury. Recycle with Scrap Metal.

Switch removal should take less than 1 minute per switch!

Some Simple Rules...

All vehicles made by

GMC prior to 2003

Ford prior to 2002

Chrysler prior to 1998

Imports do not have Mercury Switches in Convenience Lighting

Legalities of "The Kit"

The Kit is actually a Shipping Kit. It is designed so that you will not violate U.S. DOT regulations for shipping hazardous wastes (you cannot ship more than 1 pound of hazardous material). Functionally, on your shop floor, feel free to collect the switches in a closeable bucket or container; and then transfer the switches to the shipping kit for shipping. However, you should label this collection bucket with the following words, **"Mercury Auto Switches for Reclaim"**.



The Virginia Switch Out is also supported by the
Virginia Scrap Metal Recycling Industry



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